SELF-HELP NUMBER SERIES

NUMBERS AT WORK

REVISED

CLARK AND CUSHMAN

THE MACMILLAN COMPANY

				★					★
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

SELF-HELP NUMBER SERIES

NUMBERS AT WORK

BY
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ILLUSTRATED BY
MARION AND DORIS HENDERSON

THE MACMILLAN COMPANY
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TO THE TEACHER

This book is divided into eight work units. The first is a diagnostic and review section. Each of the seven other units centers around some child interest—a play store, a walk with Father, a birthday party, a playhouse, a visit to a farm, the circus, and the school. You are urged to provide an opportunity for the children to carry out related activities while they are engaged in each unit of their workbook-text. Such a plan will result in a well-rounded number program. The activities will make real the number situations described in the workbook-text, while the book will assure each child's contact with every needed number fact.

A dictionary of all combinations may be found on pages 125–128 of this book, and you are urged to see that pupils understand its use and rely upon it when they do not know the answer to a combination; thus the habit of counting may be avoided.

This material is based upon the principle of complete mastery. The pupil should absolutely master each learning step before proceeding to the next one, and in every instance provision is made for diagnostic testing and for additional supplementary drill. The prerequisites for this book are found on pages 3–6. They include the combinations which have been taught in the second book of this series. The teacher should first administer Test 1, seeing that time for counting is not allowed. She should then give an oral test, using cards containing the number combinations of Test 1. These may be obtained from the teacher's desk copy of the second book of this series, *In Number Land*, or they may be made by hand. These cards should be flashed quickly. If the pupil's responses are not quick and accurate, work on that pack should be continued until they become so. The combinations in the six tests should be mastered and reviewed as a whole before the pupil attacks the new material that follows.

The pack cards are to be torn out, separated, and kept together by a rubber band. The pupil will use them for individual self-drill. Pupils also enjoy working in pairs, each flashing the cards for the other in turn. Many group games may be played with the cards. Some are suggested in the Teacher's Edition of this book and of the second book of this series; others may be devised by teacher or children. Give the pupil the following directions for individual work:

"Take your pack of cards. Look first at the side of the card that has no answer; think the answer. Then turn the card over and see if your answer was right. If you thought of the right answer, put the card in one pile; if your answer was wrong, put the card in another pile.

"When you have finished, all the combinations that you know will be in one pile; those that you do not know will be in the other pile. Take the pile of cards that you do not know and go through them again to see if you can put some of them in the pile that you know. Keep on doing this until you can put all the cards in the pile that you know."

Pupils should also use the pack cards for assignments in writing the combinations, copying them from the side of the card that has no answer. Each child should immediately turn the cards and correct his own mistakes, thus avoiding the practice of error.

A progress chart is provided on the inside of the back cover so that each child may record and watch his own progress. While individual progression is strongly urged by the authors, teachers who use group advancement will find it equally adaptable to their use. The material on pages 113–124 may be introduced at any point where work in these processes is desired, provided that the combinations used are within the pupils' experience. See the Teacher's Edition of this book for further suggestions.

ACKNOWLEDGMENTS

The authors express their sincere appreciation to the teachers who have contributed to this revision of *Numbers at Work*, who cannot be named for lack of space. We would also make grateful mention of the active assistance with the original manuscript which was given by the late Flournoy Bryant Clark, Buna Edwards, Mildred Clark Scott, Carl Strang, and many others.

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December Printing, 1957

Dear Boys and Girls:

This book is about two children. They are Linda and Larry. They have good times at work and at play. You will like to read about them.

But you must know some things before you can work with this book. These things are on pages 3 to 6. Your teacher will see if you know them. If you do not, she will tell you what to do. See how soon you can know these things and read about Linda and Larry.

R

Test 1

1 +1 = 2	5 −4 = 1	1 +2 = 3	4 −1 = 3	2 −1 = 1
3 +1 = 4	3 −2 = 1	2 +1 = 3	1 +3 = 4	4 +1 = 5
3 −1 = 2	4 −3 = 1	2 +2 = 4	1 +4 = 5	5 −1 = 4

Test 2

5	4	3	4	5
+1	+2	+2	−2	−2
6	6	5	2	3
3	6	6	1	6
+3	−1	−4	+5	−5
6	5	2	6	1
2	6	5	6	2
+4	−2	−3	−3	+3
6	4	2	3	5

Test 3

10	9	4	9	8
−5	−8	+4	−1	−4
5	1	8	8	4
8	1	1	6	5
+1	+6	+8	+1	+5
9	7	9	7	10
7	8	7	8	1
−1	−7	−6	−1	+7
6	1	1	7	8

Write from 1 to 100.

TO THE TEACHER: Each pupil will need a sheet of paper for use in writing 1-100 as directed above.

Test 4

4	9	10	5	7
+5	+1	−1	+4	−5
9	10	9	9	2
7	9	1	2	3
−2	−4	+9	+5	+6
5	5	10	7	9
5	10	6	9	7
+2	−9	+3	−5	+1
7	1	9	4	8

Test 5

6	9	10	8	8
+2	−3	−2	+2	−2
8	6	8	10	6
7	10	3	9	8
−3	−8	+4	−6	−6
4	2	7	3	2
2	7	2	4	10
+6	−4	+8	+3	−4
8	3	10	7	6

Test 6

3	6	7	3	8
+7	+4	+2	+5	−3
10	10	9	8	5
9	10	5	4	7
−2	−6	+3	+6	+3
7	4	8	10	10
10	2	8	10	9
−3	+7	−5	−7	−7
7	9	3	3	2

Write to 100 by 10's.

10 20 30 40 50 60 70 80 90 100

Write to 100 by 5's.

5 10 15 20 25 30 35 40 45 50

55 60 65 70 75 80 85 90 95 100

The Play Store

Linda and Larry made a play store. They made it with boxes.

You can make a play store, too. Make a store and play with it.

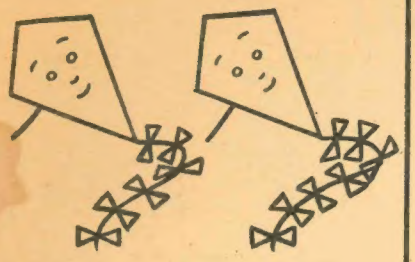
Larry made four balls for the store. Linda made one ball. How many balls did they have? 5

This is the way to write that story in numbers:

$$\begin{array}{r} 4 \\ +1 \\ \hline 5 \end{array}$$

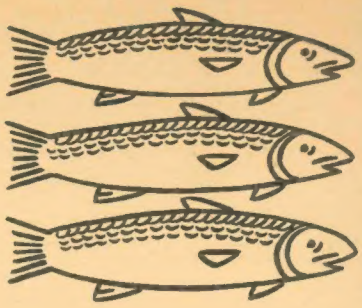
Write the story in numbers. Write it here: $\begin{array}{r} 4 \\ +1 \\ \hline 5 \end{array}$

9	1	10	10	8	2	10	10
+1	+9	−1	−9	+2	+8	−8	−2
10	10	9	1	10	10	2	8



kites

cents



fish

Linda made three kites for the store, and Larry made two kites. Then they had 5 kites.

Can you write that story in numbers? Write it here: $3 + 2 = 5$

Linda put her 4 cats in the store. One cat ran away. Three cats were left in the store.

This is the way to write that story in numbers:

$$\begin{array}{r} 4 \\ -1 \\ \hline 3 \end{array}$$

Write it here: $4 - 1 = 3$

Mother gave Linda and Larry 5 apples for the store. They ate 2 of the apples. They had 3 apples left.

Write that story in numbers. Write it here: $5 - 2 = 3$

9	2	11	11
+2	+9	−9	−2
11	11	2	9

Larry was the storekeeper. Linda went to buy. She bought a cat for 9¢ and an apple for 2¢. How many cents did she pay Larry? 11

Write this story in numbers:

There were 11 fish in the store. Linda bought 2 of them. How many fish were left in the store? 9

Write this story in numbers:

11	2	9	11	11	9	2	11
−2	+9	+2	−9	−2	+2	+9	−9
9	11	11	2	9	11	11	2

2	9	9	10	10	10	11	11
+9	+2	−8	−4	−7	−8	−2	−9
11	11	1	6	3	2	9	2

$$\begin{array}{r} 6 \\ +6 \\ \hline 12 \end{array} \qquad \begin{array}{r} 12 \\ -6 \\ \hline 6 \end{array}$$

Linda was the storekeeper, and Larry went to buy. He bought a kite for 6 cents and a rabbit for six cents. How many cents did he pay Linda? ____

Write this story in numbers: ____

Larry had 12¢ left. He bought a boat for 6¢. How much money did he have then? ____

Write this story in numbers: ____

$$\begin{array}{r} 2 \\ +9 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ -3 \\ \hline \end{array} \quad \begin{array}{r} 11 \\ -2 \\ \hline \end{array} \quad \begin{array}{r} 11 \\ -9 \\ \hline \end{array} \quad \begin{array}{r} 12 \\ -6 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ +9 \\ \hline \end{array} \quad \begin{array}{r} 6 \\ +6 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ -2 \\ \hline \end{array} \quad \begin{array}{r} 11 \\ -9 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ +2 \\ \hline \end{array} \quad \begin{array}{r} 2 \\ +9 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ +1 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ +4 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ -2 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ +5 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ +8 \\ \hline 16 \end{array} \qquad \begin{array}{r} 16 \\ -8 \\ \hline 8 \end{array}$$

Linda said: "Larry, we do not have many things in our store. We will make some more." So they made some more things.

Larry made 8 apples and Linda made 8 apples. How many apples did they make? 16

They made 16 apples. They colored 8 apples red. They made the other apples yellow.

Draw the yellow apples.

$$\begin{array}{r} 11 \\ -2 \\ \hline 9 \end{array} \quad \begin{array}{r} 16 \\ -8 \\ \hline 8 \end{array} \quad \begin{array}{r} 6 \\ +6 \\ \hline 12 \end{array} \quad \begin{array}{r} 16 \\ -8 \\ \hline 8 \end{array} \quad \begin{array}{r} 8 \\ +8 \\ \hline 16 \end{array} \quad \begin{array}{r} 16 \\ -8 \\ \hline 8 \end{array} \quad \begin{array}{r} 8 \\ +8 \\ \hline 16 \end{array} \quad \begin{array}{r} 12 \\ -6 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 7 \\ +3 \\ \hline 10 \end{array} \quad \begin{array}{r} 16 \\ -8 \\ \hline 8 \end{array} \quad \begin{array}{r} 2 \\ +3 \\ \hline 5 \end{array} \quad \begin{array}{r} 8 \\ +8 \\ \hline 16 \end{array} \quad \begin{array}{r} 9 \\ +1 \\ \hline 10 \end{array} \quad \begin{array}{r} 9 \\ +2 \\ \hline 11 \end{array} \quad \begin{array}{r} 9 \\ -3 \\ \hline 6 \end{array} \quad \begin{array}{r} 7 \\ -1 \\ \hline 6 \end{array}$$

3	9	12	12
+9	+3	−3	−9
12	12	9	3

Larry said, "We must have 12 balloons in the play store."

"We have 3 balloons now," said Linda. "How many more must we make?"

"12 less 3 leaves 9," said Larry. "That is how many we must make."

How many more balloons did they make? 9 Write this story in numbers. 12 − 3 = 9

Linda and Larry had 3 balloons. They made 9 more. How many balloons did they have then? 12

9	3	12	12	3	12	9	12
+3	+9	−3	−9	+9	−9	+3	−3
12	12	9	3	12	3	12	9

1	3	2	6	3	8	9	9
+9	+9	+9	+6	+2	+8	+3	−3
10	12	11	12	5	16	12	6

4	8	12	12
+8	+4	−8	−4
12	12	4	8

A little boy came to play with Linda and Larry. Larry said, "You may be the storekeeper. We will come to buy." Linda bought 4 cookies, and Larry bought 8 cookies. How many cookies did they both buy? 12

Write this story in numbers:

$$\begin{array}{r} 4 \\ +\,8 \\ \hline 12 \end{array}$$

There were 12 balloons in the store. Larry bought 4 balloons. How many balloons were left in the store? 8

3	4	8	11	12	12	3	4
+9	+8	+4	−2	−4	−8	+9	+8
12	12	12	9	8	4	12	12
8	9	12	12	12	12	16	3
+4	+3	−3	−4	−8	−9	−8	+9
12	12	9	18	4	3	8	12
4	8	9	12	12	12	12	16
+8	+4	+3	−3	−4	−8	−9	−8
12	12	12	9	8	4	3	8

Linda bought a cat for 9¢ and a cup for 3¢. How much did she give for them? 12

Linda bought a fish for 2¢ and a doll for 9¢. How much did she give for them? 11

Larry bought a balloon for 4¢ and an airplane for 8¢. How much did he give for them? 12

Linda had 11 cents left. She paid 9¢ for an airplane. How much did she have then? 2

Larry had 12 cents left. He paid 8¢ for a dog. How much did he have then? 4

Larry said to the little boy, "I will be the storekeeper and you may come and buy."

The little boy had 12¢. He bought an airplane for 9¢. How many cents did he have left? 3

Write one of these stories in numbers:

3	9	6	8	4	8	6	8
+3	−3	+6	+4	+8	+8	+6	+4
6	6	12	12	12	16	12	12

8	9	9	12	4	12	12	9
+8	+3	−3	−4	+8	−8	−3	−3
16	12	6	8	12	4	9	6

Write the numbers that are left out.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Write to 100 by 2's.

2	4	6	8	10	12	14	16	18	20
22	24	26	28	30	32	34	36	38	40
42	44	46	48	50	52	54	56	58	60
62	64	66	68	70	72	74	76	78	80
82	84	86	88	90	92	94	96	98	100

Write to 100 by 2's in rows like this:

2	12	22	32	42	52	62	72	82	92
4	14	24	34	44	54	64	74	84	94
6	16	26	36	46	56	66	76	86	96
8	18	28	38	48	58	68	78	88	98
10	20	30	40	50	60	70	80	90	100

A Walk with Father

One day Larry and Linda went for a walk with Father. They saw some trees. The trees looked like Christmas trees.

Father said, "How many trees do you see, Larry?"

"I see eight big trees and three little trees," said Larry.

"I know how many there are in all," said Linda. "8 trees and 3 trees are 11 trees."

"That is good," said Father. "If 8 and 3 are 11, how many are 3 and 8?"

Can you tell? Write the number here: 11

Write this story in numbers:

8	3	11	11	11	3
+3	+8	−3	−8	−3	+8
11	11	8	3	8	11

11	11	8	11	11	3
−3	−8	+3	−3	−8	+8
8	3	11	8	3	11

"Yes, there are 11 trees," said Father. "If some one cut down the 3 little trees for Christmas, how many would be left, Larry?"

"Oh, I know that," said Linda.

Linda did know. Do you? Write the number here: ____

11	11	11	8	3	11	3	8
−3	−8	−3	+3	+8	−8	+8	+3
8	3						

3	2	3	4	6	8	8	8
+9	+9	+8	+8	+6	+3	+8	+4

11	11	11	11	12	10	16	12
−3	−8	−2	−9	−4	−7	−8	−8

$$\begin{array}{r} 7 \\ +7 \\ \hline 14 \end{array} \qquad \begin{array}{r} 14 \\ -7 \\ \hline 7 \end{array}$$

"Oh, look, Larry," cried Linda. "See the birds in the trees. There are seven birds in one tree and seven in another tree."

"Yes," said Larry, "that makes 14 birds in both trees."

"See them fly away," cried Linda.

"Only 7 flew away," said Larry.

"There are 7 left."

14 birds less 7 birds leaves 7 birds.

7	14	8	7	9	11	14	7
+7	−7	+3	+7	+3	−3	−7	+7
14	7	11	14	12	8	7	14
11	12	12	12	12	7	14	16
−8	−3	−6	−4	−8	+7	−7	−8
3	9	6	8	4	14	7	8
11	12	12	11	12	12	12	2
−2	−4	−3	−2	−6	−9	−8	+3
9	8	9	9	6	3	4	5

4	7	11	11
+7	+4	−7	−4
11	11	4	7

Father, Linda, and Larry saw some rabbits. 4 rabbits were asleep. 7 rabbits were eating lettuce. 4 rabbits and 7 rabbits are how many rabbits? 11

4 and 7 are 11. 7 and 4 are 11.

Write this story in numbers: $\begin{array}{r} 4 \\ +7 \\ \hline 11 \end{array}$

7	4	11	11	11	4	11	11
+4	+7	−4	−7	−4	+7	−3	−7
11	11	7	4	7	11	8	4

3	4	7	3	7	11	11	7
+8	+7	+7	+8	+4	−7	−4	+7
11	11	14	11	11	4	7	14

There were 11 rabbits in the pen. Linda and Larry gave them some apples. 4 rabbits did not eat the apples. How many rabbits did eat the apples? 7

Write this story in numbers:

4	7	11	11	16	11	11	8
+7	+4	−4	−7	−8	−4	−7	+8
11	11	7	4	8	7	4	16
8	7	5	4	3	1	2	2
+3	+7	+5	+7	+8	+3	+4	+9
11	14	10	11	11	4	6	11
3	4	8	7	8	9	11	11
+8	+7	+3	+4	+8	+3	−2	−4
11	11	11	11	16	12	9	7
11	11	12	12	12	12	16	7
−7	−9	−3	−8	−3	−9	−8	+7
4	2	9	4	9	3	8	14

5	6	11	11
+6	+5	−5	−6
11	11	6	5

Larry, Linda, and Father went to see a man who liked birds. They saw all of his bird houses. Some of the houses were yellow, and some of them were white. Five of the houses were yellow, and 6 of them were white. How many bird houses were there? 11

There were 11 bird houses. They were in the garden. A man took five of the houses out of the garden and put them in the apple trees. Then there were only 6 houses left in the garden.

Write this story in numbers: 11 − 5 = 6

6	5	11	11	5	11	6	11
+5	+6	−5	−6	+6	−5	+5	−6
11	11	6	5	11	6	11	5

2	3	3	3	3	4	4	4
+9	+2	+4	+7	+9	+2	+6	+8
11	5	7	10	12	6	10	12

$$\begin{array}{r} 9 \\ +9 \\ \hline 18 \end{array} \qquad \begin{array}{r} 18 \\ -9 \\ \hline 9 \end{array}$$

"Look," said Father. "Do you see the little birds in the trees? They have gone to bed for the night."

Nine little birds were in one tree, and nine more were in another tree. How many birds were in both trees? 18

Write this story in numbers: $\begin{array}{r} 9 \\ +9 \\ \hline 18 \end{array}$

$$\begin{array}{r} 9 \\ +9 \\ \hline 18 \end{array} \quad \begin{array}{r} 18 \\ -9 \\ \hline 9 \end{array} \quad \begin{array}{r} 7 \\ +4 \\ \hline 11 \end{array} \quad \begin{array}{r} 7 \\ +7 \\ \hline 14 \end{array} \quad \begin{array}{r} 18 \\ -9 \\ \hline 9 \end{array} \quad \begin{array}{r} 8 \\ +3 \\ \hline 11 \end{array} \quad \begin{array}{r} 9 \\ +9 \\ \hline 18 \end{array} \quad \begin{array}{r} 18 \\ -9 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 12 \\ -3 \\ \hline 9 \end{array} \quad \begin{array}{r} 11 \\ -3 \\ \hline 8 \end{array} \quad \begin{array}{r} 12 \\ -4 \\ \hline 8 \end{array} \quad \begin{array}{r} 12 \\ -8 \\ \hline 4 \end{array} \quad \begin{array}{r} 6 \\ +5 \\ \hline 11 \end{array} \quad \begin{array}{r} 11 \\ -5 \\ \hline 6 \end{array} \quad \begin{array}{r} 5 \\ +1 \\ \hline 6 \end{array} \quad \begin{array}{r} 11 \\ -7 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 5 \\ +6 \\ \hline 11 \end{array} \quad \begin{array}{r} 11 \\ -6 \\ \hline 5 \end{array} \quad \begin{array}{r} 11 \\ -8 \\ \hline 3 \end{array} \quad \begin{array}{r} 4 \\ +7 \\ \hline 11 \end{array} \quad \begin{array}{r} 14 \\ -7 \\ \hline 7 \end{array} \quad \begin{array}{r} 8 \\ +8 \\ \hline 16 \end{array} \quad \begin{array}{r} 11 \\ -4 \\ \hline 7 \end{array} \quad \begin{array}{r} 3 \\ +9 \\ \hline 12 \end{array}$$

Larry found 18 pretty leaves to take to Mother.

He said: "Linda, you may take 9 leaves to Mother. I will take the others."

How many leaves did Larry take to Mother? 1

Write this story in numbers: $18 - 9 = 9$

12	14	1	4	9	18	11	8
−9	−7	+1	+3	+9	−9	−6	+8
3	7	2	7	18	9	5	16

10	8	11	12	11	11	9	11
−8	+3	−4	−8	−5	−7	+9	−8
2	11	7	4	6	4	18	3

Begin with 100 and write to 200, like this:

101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170
171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190
191	192	193	194	195	196	197	198	199	200

To THE TEACHER: If further practice is needed, the pupil may repeat this exercise on another sheet of paper.

Begin with 200 and write to 300, like this:

201	202	203	204	205	206	207	208	209	210
211	212	213	214	215	216	217	218	219	
									300

To THE TEACHER: If further practice is needed, the pupil may repeat this exercise on another sheet of paper.

Can you count by 100's to 1000? Do it like this:

100	200	300	400	500	600	700	800	900	1000

Write to 1000 by 100's.

Learn to count to 1000 by 100's without looking.

4	6	8	9	11	12	12	16
+8	+6	+8	+3	−2	−4	−8	−8
12	12	16	12	9	8	4	8
4	4	5	3	11	2	11	4
−1	+7	+6	+8	−5	+9	−4	+8
3	11	11	11	6	11	7	12
9	11	6	11	9	12	12	9
+9	−7	+5	−8	+9	−8	−9	+3
18	4	11	3	18	4	3	12
18	14	4	12	8	18	16	8
−9	−7	+7	−3	+3	−9	−8	+3
9	7	11	9	11	9	8	11

The Birthday Party

Linda and Larry had a birthday. Mother said that they could have a party.

Larry went out to look for eggs to make little cakes for the party. He found 2 eggs in the first nest, but he found 0 eggs in the next nest. So he took ___ eggs to Mother.

Here are the 2 nests. Draw the eggs in the nest where he found them.

The first nest The next nest

2 eggs and 0 eggs are ___ eggs.

This is the way to write this story in numbers:

$$\begin{array}{r} 2 \\ +0 \\ \hline 2 \end{array}$$

2	0	2
+0	+2	−0
2	2	2

They looked for red and white paper to make caps for the party. They found 0 pieces of red paper, but they found 2 pieces of white. How many pieces of paper did they find? ____

0 pieces and 2 pieces are ____ pieces.

0 and 2 are 2. 0 and 2 are ____.

This is the way to write this story in numbers:

$$\begin{array}{r} 0 \\ +2 \\ \hline 2 \end{array}$$

2	0	2	0	2	2	0	2
+0	+2	−0	+2	−0	+0	+2	−0
2	2	2	2	2	2	2	2

9	11	18	6	12	7	5	14
+9	−8	−9	+5	−9	+4	+6	−7
18	3	9	11	3	11	11	7

$$\begin{array}{r} 1 \\ +0 \\ \hline 1 \end{array} \qquad \begin{array}{r} 0 \\ +1 \\ \hline 1 \end{array} \qquad \begin{array}{r} 1 \\ -0 \\ \hline 1 \end{array}$$

Larry said, "We will play ball at our party." Larry had 1 ball. Linda had none. How many balls did they have for the party? 1

Larry had 1 ball. Linda had 0 balls.

1 ball and 0 balls are 1 ball.

1 and 0 are 1. 1 and 0 are 1.

Write this story in numbers: $1 + 0 = 1$

"I will take my doll to the party," said Linda. "You have 0 dolls, and I have 1 doll. How many dolls have we both?"

"One," said Larry. "0 and 1 are 1."

Write this story in numbers: $0 + 1 = 1$

$$\begin{array}{r} 1 \\ +0 \\ \hline 1 \end{array} \quad \begin{array}{r} 0 \\ +1 \\ \hline 1 \end{array} \quad \begin{array}{r} 1 \\ -0 \\ \hline 1 \end{array} \quad \begin{array}{r} 0 \\ +1 \\ \hline 1 \end{array} \quad \begin{array}{r} 1 \\ +0 \\ \hline 1 \end{array} \quad \begin{array}{r} 1 \\ -0 \\ \hline 1 \end{array} \quad \begin{array}{r} 1 \\ +0 \\ \hline 1 \end{array} \quad \begin{array}{r} 1 \\ -0 \\ \hline 1 \end{array}$$

7	6	13	13
+6	+7	−7	−6
13	13	6	7

Larry asked 7 boys to come to the party, and Linda asked 6 girls. How many children were asked to come? 13

Write this story in numbers: $\begin{array}{r} 7 \\ +6 \\ \hline 13 \end{array}$

7	6	13	13	6	13	7	13
+6	+7	−7	−6	+7	−6	+6	−7
13	13	6	7	13	7	13	6
11	9	13	1	13	2	8	11
−8	+9	−6	+0	−7	+0	+3	−6
3	18	7	1	6	2	11	5
14	2	8	11	0	6	7	5
−7	−0	+4	−5	+1	+7	+6	+6
7	2	12	6	1	13	13	11
11	4	7	4	3	9	4	0
−4	−2	+4	+8	+9	+9	+7	+2
7	2	11	12	12	18	11	2

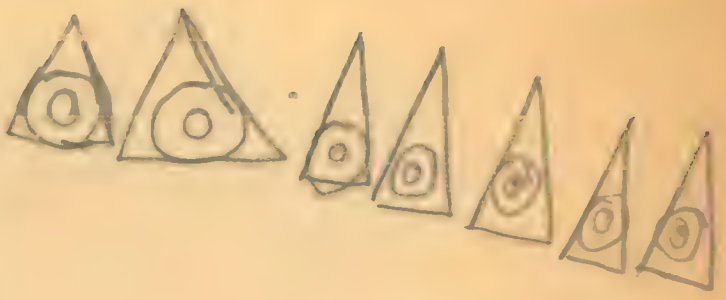
13 children came to the party. 7 of them lived near Linda and Larry's house. They walked to the party. The other children came in cars. How many children came in cars? 6

Write this story in numbers:

$$\begin{array}{r} 13 \\ -\ 7 \\ \hline 6 \end{array}$$

3	6	9	11	4	13	0	5
+8	+7	+2	−3	+6	−7	+1	+6
11	13	11	8	10	6	1	11
8	13	2	0	11	6	8	11
+4	−6	+9	+2	−5	+7	+8	−4
12	7	11	2	6	13	16	7
11	4	7	12	1	3	13	9
−7	+8	+6	−9	+0	+9	−6	+9
4	12	13	3	1	12	7	18
4	13	7	2	4	11	9	6
+4	−6	+6	+0	+8	−9	+3	+2
8	7	13	2	12	2	12	8

Linda gave the children 13 paper caps. 6 of the caps were red. The others were green.

Draw the green caps here: 

Draw the red caps here:

0	1	2	13	13	7	6	4
+2	−0	+0	−7	−6	+7	+7	+7
2	1	2	6	7	14	13	11
6	11	6	6	11	5	7	11
+6	−5	−4	+7	−6	+5	+7	−3
12	6	2	13	5	10	14	8

7	8	15	15
+8	+7	−7	−8
15	15	8	7

Mother counted all the children. She counted Larry and Linda, too. She counted 8 boys and 7 girls. She counted 15 children at the party.

Write this story in numbers: 8 + 7 = 15

The 15 children were playing on the grass. "Come and see my rabbits," said Larry. 8 of the children ran to see Larry's rabbits, but 7 of them stayed to play on the grass.

15 children less 8 children leaves 7 children.

Write this story in numbers: 7 + 8 = 15

7	8	15	15	8	15	7	15
+8	+7	−7	−8	+7	−8	+8	−7
15	15	8	7	15	7	15	8

Mother had a box of balloons. "Here are 15 balloons," she said. She gave 7 of the balloons to the children who were playing on the grass. Then there were ____ balloons left in the box.

Write this story in numbers: 15 − 7 = 8

3	11	6	8	11	3	13	7
+8	−5	+7	+7	−6	+9	−6	+6
11	6	13	15	5	12	7	13
15	7	13	4	18	9	8	0
−7	+8	−7	+7	−9	+9	+4	+1
8	15	6	11	9	18	12	1
15	7	9	13	4	11	8	6
−8	+8	+9	−6	+8	−8	+7	+7
7	15	18	7	12	3	15	13
2	12	8	15	15	6	13	2
−0	−3	+7	−8	−7	+5	−7	+0
2	9	15	7	8	11	6	2

A balloon man came by. Mother bought more balloons.

Linda had 4 balloons, and the wind took them all away.

"Oh, look!" cried the children. "The wind has taken Linda's 4 balloons away. Now she has no balloons!"

Linda had 4 balloons. The wind took 4 balloons. How many balloons did Linda have left? 0

4 balloons less 4 balloons leaves 0 balloons.

Write this story in numbers: $4 - 4 = 0$

4	4	15	4	15	8	4	7
−4	−4	−8	−4	−7	+7	−4	+7
0	0	7	0	8	15	0	14

Larry had 1 balloon. He gave 1 balloon to Linda. How many balloons did he have then? 0

1 balloon less 1 balloon leaves 0 balloons.

1 less 1 leaves 0. 1 less 1 leaves 0.

1	4	0	1	15	9	4	1
−1	−4	+2	−1	−8	+9	−4	−1
0	0	2	0	7	18	0	0
13	0	11	7	9	15	6	11
−6	+1	−5	+7	+9	−7	+7	−6
7	1	6	14	18	8	13	5
8	7	13	0	8	11	6	15
+7	+6	−6	+2	+4	−8	+7	−8
15	13	7	2	12	3	13	7
8	18	2	6	2	11	7	5
+7	−9	−0	+5	+0	−3	+7	+6
15	9	2	11	2	8	14	11
3	13	8	4	3	15	4	15
+8	−7	+7	+8	+9	−7	+7	−8
11	6	15	12	12	8	11	7

Mother put some little cakes on the table for the party. There were 7 brown cakes and 8 white cakes. How many cakes did Mother put on the table? 15

Write this story in numbers: $7 + 8 = 15$

They had milk at the party, too. Mother said: "We will give milk to the children. Linda may give milk to the girls and Larry may give milk to the boys."

Linda gave milk to 6 girls, and Larry gave milk to 7 boys. How many children got milk? 13

Write this story in numbers: $6 + 7 = 13$

Begin with 1 and write the numbers that are left out. They are called odd numbers.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Write the odd numbers to 100.

1	11	21	31	41	51	61	71	81	91
3	13	23	33	43	53	63	73	83	93
5	15	25	35	45	55	65	75	85	95
7	17	27	37	47	57	67	77	87	97
9	19	29	39	49	59	69	79	89	99

6	12	2	12	9	6	11	12
+6	−6	+9	−6	+2	+6	−2	−6
12	6	11	6	11	12	9	6

11	12	2	6	9	11	11	12
−9	−6	+9	+6	+2	−2	−9	−6
2	6	11	12	11	9	2	6

The Playhouse

Linda and Larry wanted a playhouse.

"We will make one," said Larry.

Father gave them a big box for the house. He gave them 7 big boards for the roof and 5 little boards for the door. How many boards did he give them? 12

5	7	12	12
+7	+5	−7	−5
12	12	5	7

"We must have nails to make the playhouse," said Larry.

He found 12 nails in a board. He pulled 5 of the nails out of the board. He could not get the other nails out. How many nails did he leave in the board? 7

Larry had another board with 12 nails in it. He pulled 7 of them out. How many nails were left in that board? 5

Write this story in numbers: 12 − 7 = 5

5	7	12	12	12	7	12	11
+7	+5	−5	−7	−5	+5	−7	−4
12	12	7	5	7	12	5	7
12	1	13	15	11	11	2	15
−5	+9	−6	−7	−3	−2	+1	−8
7	10	7	8	8	9	3	7
10	2	2	12	2	10	5	15
−4	+2	+4	−8	+5	−1	+7	−7
6	4	6	4	7	9	12	8
15	5	7	10	7	7	13	7
−8	+7	+5	−9	+8	+5	−7	+8
7	12	12	1	15	12	6	15
8	9	5	8	9	9	9	8
−6	−8	+7	+7	−5	−6	−1	+7
2	1	12	15	4	3	8	15

3	0	3
+0	+3	−0
3	3	3

Linda said: "We will take our money and buy some nails. I have 3 cents. How many have you?"

"I do not have any," said Larry.

How many cents did they both have? 3

Linda had 3 cents. Larry had 0 cents. 3 cents and 0 cents are 3 cents.

3 and 0 are 3. 3 and 0 are 3.

Write this story in numbers: 3 + 0 = 3

3	0	3	1	3	2	0	3
+0	+3	−0	+0	+0	+0	+3	−0
3	3	3	1	3	2	3	3

12	5	12	7	3	7	2	12
−5	+7	−7	+5	+2	+5	−0	−5
7	12	5	12	5	12	2	7

6	8	14	14
+8	+6	−8	−6
14	14	6	8

Linda and Larry put 14 windows in their house. Larry made 8 windows. How many windows did Linda make? 6

Write this story in numbers: 14 − 8 = 6

6 windows and 8 windows are how many windows? 14

6 and 8 are 14. 8 and 6 are 14.

6	8	14	14	6	14	14	8
+8	+6	−6	−8	+8	−8	−6	+6
14	14	8	6	14	6	8	14

1	14	8	7	1	12	2	5
+0	−8	+7	+5	−0	−5	+9	+7
1	6	15	12	1	7	11	12

7	0	5	3	14	8	4	4
+3	+3	+7	−0	−6	+6	+7	+8
15	3	12	3	8	14	11	12

Mother gave Larry 5 cents. He gave a boy 5 cents for some paint to paint the playhouse. How much money did Larry have left? 0¢

Larry had 5 cents. He gave the boy 5 cents. He had 0 cents left.

5 cents less 5 cents leaves 0 cents.

5 less 5 leaves 0. 5 less 5 leaves 0.

5	7	8	5	12	5	3	5
−5	+5	+6	−5	−5	−5	+0	−5
0	12	14	0	7	0	3	0

12	14	14	3	14	4	6	14
−7	−8	−8	−0	−6	+8	+8	−6
5	6	6	3	8	12	14	8

Larry had 7 boards.

He said, "If I have any boards left after I make the roof, I will make a dog house."

He used 7 boards for the roof. Did he have any boards left for the dog house? NO

7 boards less 7 boards leaves 0 boards.

7 less 7 leaves 0. 7 less 7 leaves 0.

7	5	7	6	7	11	7	8
−7	−5	−7	+8	+1	−4	−3	+4
0	0	0	14	8	7	4	12
12	0	12	14	9	3	8	10
−4	+3	−9	−8	−7	−0	+6	−3
8	3	3	6	2	3	14	7
8	1	7	9	12	10	7	14
+6	−0	+5	−2	−5	−7	−6	−6
14	1	12	7	7	3	1	8
1	12	10	3	14	8	10	6
+0	−7	−5	+0	−8	−2	−8	+8
1	5	5	3	6	6	2	14

$$\begin{array}{r} 9 \\ +0 \\ \hline 9 \end{array} \qquad \begin{array}{r} 0 \\ +9 \\ \hline 9 \end{array} \qquad \begin{array}{r} 9 \\ -0 \\ \hline 9 \end{array}$$

When the house was all made, Linda and Larry played in it. One day Mother came to the playhouse.

"Here are some apples for you," said Mother. "You may have a party in the new playhouse."

"May we make some candy, too?" asked Larry. "We will buy some nuts for it."

"Yes, you may," said Mother. "I will help you."

"I have no money to buy nuts, Larry," said Linda.

"I have 9 cents," said Larry.

How many cents did they both have? 9

Larry had 9 cents. Linda had 0 cents. 9 cents and 0 cents are 9 cents. 9 and 0 are 9.

Write this story in numbers:

$$\begin{array}{r} 9 \\ +0 \\ \hline 9 \end{array} \quad \begin{array}{r} 0 \\ +9 \\ \hline 9 \end{array} \quad \begin{array}{r} 9 \\ -0 \\ \hline 9 \end{array} \quad \begin{array}{r} 7 \\ -7 \\ \hline 0 \end{array} \quad \begin{array}{r} 9 \\ +0 \\ \hline 9 \end{array} \quad \begin{array}{r} 3 \\ -0 \\ \hline 3 \end{array} \quad \begin{array}{r} 0 \\ +9 \\ \hline 9 \end{array} \quad \begin{array}{r} 9 \\ -0 \\ \hline 9 \end{array}$$

Then Larry and Linda went to the store. Larry said to the storekeeper: "We want some nuts. We have 9 cents for the nuts. We are going to have a party in our new playhouse."

The storekeeper liked Linda and Larry. He was glad they had a new playhouse. He said: "Here are the nuts, Larry, but I will not take the money. I will give you the nuts for the party."

Larry had 9 cents. The storekeeper took 0 cents for the nuts. How many cents did Larry have left? 9

9 cents less 0 cents leaves 9 cents.

9 less 0 leaves 9.

Write this story in numbers:

9
0
9

3	14	4	6	6	7	13	14
+9	−8	+8	+7	+8	+4	−7	−6
12	6	12	13	14	11	6	8

7	8	9	7	12	14	15	9
+5	+6	+3	+6	−5	−8	−8	+0
12	14	12	13	7	6	7	9

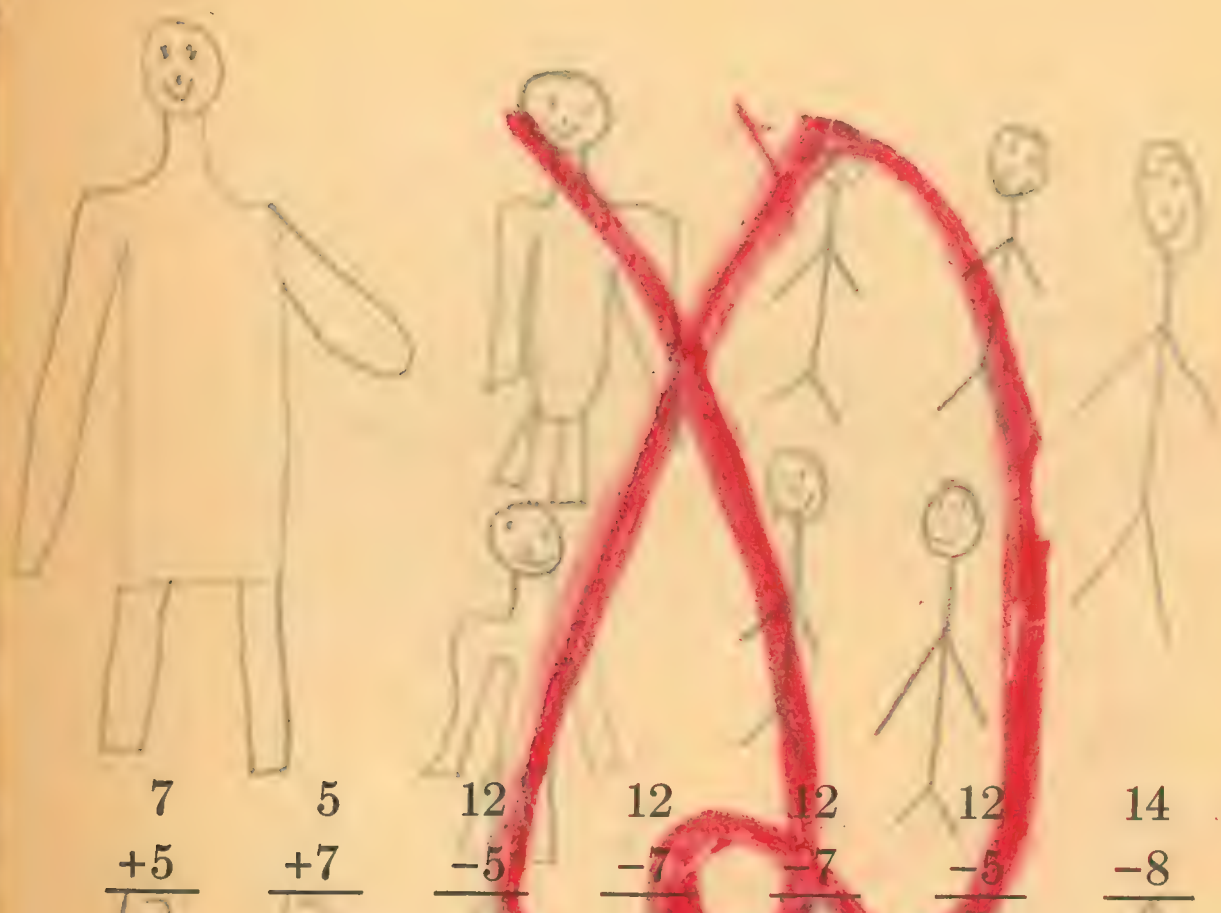
Linda asked 5 girls to come to the playhouse party. Larry asked 7 boys. How many children did they ask to come to the party? 12

Write this story in numbers: $5 + 7 = 12$

14	6	12	6	7	8	8	8
−8	+7	−7	+8	+8	+3	+6	+7
6	13	5	14	15	11	14	15
18	11	9	13	14	14	15	15
−9	−3	+9	−6	−8	−7	−7	−8
9	8	18	7	6	7	8	7
5	4	8	6	7	12	8	14
+7	+8	+6	+7	+5	−5	+7	−6
12	12	14	13	12	7	15	8
11	7	3	4	7	4	15	7
−4	+4	+8	+7	+8	+7	−8	+6
7	11	11	11	15	11	7	13

Linda and Larry were at the party, too. There were 14 children at the party. 6 of them were girls. How many were boys? 8

Draw the boys who came to the party.



7	5	12	12	12	12	14	7
+5	+7	−5	−7	−7	−5	−8	+5
12	12	7	5	5	7	6	12

14	6	7	7	9	11	11	12
−8	−5	−4	−5	+2	−2	−9	−6
6	1	3	2	11	9	2	6

Grandmother said, "Come with me and I will show you some baby chickens that have just hatched." The baby chickens were in the nest under the mother hen.

"Have all the eggs hatched?" asked Linda.

"No," said Grandmother, "the hen had 17 eggs in the nest, and only 9 of them have hatched."

How many eggs had not hatched? 8

12	6	17	4	12	13	17	6
−7	−4	−8	+9	−4	−9	−8	+8
5	2	9	13	8	4	9	14

8	13	4	13	17	9	8	9
+7	−9	+9	−4	−8	+8	+9	+4
15	4	13	9	9	17	17	13

Linda went to the garden. She went to get some flowers. She got 8 red flowers and 9 yellow flowers. How many flowers did she get? 17

Linda took 17 flowers to Grandmother. She said: "The 9 yellow flowers are for you, Grandmother. The other flowers are for Grandfather."

Draw the flowers that Linda gave to Grandfather.

17 flowers less 9 flowers leaves 8 flowers.

Write this story in numbers:

$$\begin{array}{r} 17 \\ -\ 9 \\ \hline 8 \end{array}$$

14	1	1	1	13	2	13	2
−8	+4	+6	+8	−9	+3	−9	+9
6	5	7	9	4	5	4	11

While Linda was in the garden, she saw many pretty butterflies.

She saw 3 yellow butterflies on a white flower. The three butterflies flew away.

How many butterflies did she see on the white flower? 3
How many flew away? 3 How many were left on the white flower? 0

3 butterflies less 3 butterflies leaves 0 butterflies.

3 less 3 leaves 0.

3	3	5	3	8	9	4	3
−3	−3	−5	−3	+9	+4	+9	−3
0	0	0	0	17	13	13	0

13	17	14	9	17	13	17	9
−4	−9	−6	+8	−9	−9	−8	+4
9	8	8	17	8	4	9	13

6	9	15	15
+9	+6	−9	−6
15	15	6	9

6	9	15	15	15	9	6	15
+9	+6	−9	−6	−9	+6	+9	−6
15	15	6	9	6	15	15	9

3	13	5	12	6	2	3	6
+8	−9	+7	−7	+9	+0	+9	+8
11	4	12	5	15	2	12	14

17	6	3	14	8	17	9	8
−9	+8	−0	−6	+7	−9	+8	+6
8	14	3	8	15	8	17	14

7	11	9	12	8	15	9	10
+6	−8	+6	−5	+9	−6	+8	−6
13	3	15	7	17	9	17	4

13	4	13	9	2	17	13	8
−4	+9	−4	+4	−0	−8	−9	+9
9	13	9	13	2	9	4	17

17
−9
8

Linda told Larry about the butterflies.

"Larry," she said, "I saw 9 yellow butterflies and 6 black ones with yellow on their wings."

"I know how many butterflies you saw," said Larry.

Do you? Write the number here: 15

Color the butterflies for this story.

Larry went with Linda to see the butterflies. He saw 8 yellow ones. 8 yellow ones flew away. How many yellow butterflies were left? 0

How many did he see? 8 How many flew away? 8

8 butterflies less 8 butterflies leaves 0 butterflies.

8 less 8 leaves 0.

8	8	3	8	5	13	5	8
−8	−8	−3	−8	−5	−9	+5	−8
0	0	0	0	0	4	10	0

12	14	6	13	6	13	1	11
−5	−6	+7	−9	+8	−4	−0	−3
7	8	13	4	14	9	1	8

10	10	17	6	17	9	15	7
−1	−4	−8	+9	−9	+8	−6	+5
9	6	9	15	8	17	9	12

9	9	15	15	8	4	15	8
+6	+4	−6	−9	+9	+9	−9	+6
15	13	9	6	17	13	6	14

Linda said, "Grandmother, I like to go to the garden."

"Good," said Grandmother. "You may cut some flowers for the table."

Linda cut 6 red flowers and 9 white ones. She put them on the table. How many flowers did Linda put on the table? 15

Write this story in numbers:

$$\begin{array}{r} 6 \\ +9 \\ \hline 15 \end{array}$$

"Did you cut all of the red flowers?" asked Grandmother.

"No, Grandmother," said Linda. "There were 15 of them in the garden, and I cut 6. I left 9 red flowers in the garden."

Write this story in numbers:

$$\begin{array}{r} 15 \\ -6 \\ \hline 9 \end{array}$$

$$\begin{array}{rrrrrrrr} 6 & 9 & 15 & 15 & 9 & 15 & 6 & 15 \\ +9 & +6 & -6 & -9 & +6 & -9 & +9 & -6 \\ \hline 15 & 15 & 9 & 6 & 15 & 6 & 15 & 9 \end{array}$$

$$\begin{array}{r} 0 \\ +0 \\ \hline 0 \end{array}$$

Grandmother said, "The rabbits have been in my garden."

"Are they in the garden now?" asked Larry.

"We will look and see," said Linda.

They looked for the rabbits. Linda found no rabbits. Larry found no rabbits. How many rabbits did they both find? 0

Linda found 0 rabbits. Larry found 0 rabbits. 0 rabbits and 0 rabbits are 0 rabbits.

0 and 0 are 0. 0 and 0 are 0.

0	0	8	0	8	9	0	13
+0	+0	+9	+0	−8	+6	+0	−7
0	0	17	0	0	15	0	6
4	0	9	9	14	8	17	6
+9	+0	+6	+9	−6	+9	−9	+9
13	0	15	18	8	17	8	15

To THE TEACHER: The dramatization of number stories is a valuable activity and should precede work with the following page. One pupil "plays" a number story; then another writes the combination suggested by the dramatization.

One day Linda and Larry were playing number stories. Linda tried to catch Larry on this one:

"All of the nuts that I have are in this box, Larry," she said. "You may take all of them. Then write the story in numbers."

Larry put his hand into the box. There was nothing in it. Larry laughed.

"That is not a number story," he said. "There are no numbers in it."

"Yes, it is," said Linda. "I had no nuts and I gave away no nuts; then I had no nuts left."

"Oh," said Larry, "you can not catch me on that again! I can write it." And he did. He wrote it like this:

$$\begin{array}{r} 0 \\ -0 \\ \hline 0 \end{array}$$

4	15	11	8	11	9	13	9
+7	−9	−4	+7	−9	+8	−4	+3
11	6	7	15	2	17	9	12
12	8	6	6	8	9	13	14
−7	+6	−5	+8	−6	+6	−9	−6
5	16	1	14	2	15	4	8
9	14	15	17	9	6	2	0
+2	−8	−6	−9	+4	+9	+9	−0
11	6	9	8	13	15	11	0

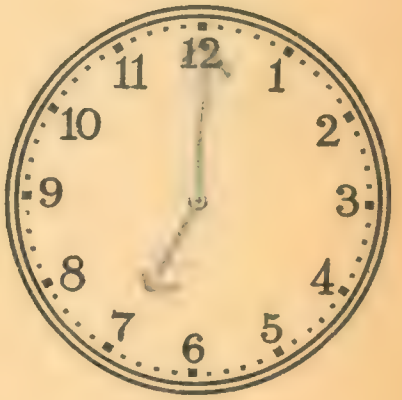
Grandmother had 15 baby ducks. Linda and Larry went to see them. 9 of the ducks were swimming in the water. The others were running on the grass.

Draw the ducks that were on the grass.

Linda and Larry got up every morning at 7:00 o'clock. They ate breakfast at 7:30 o'clock. At 8:00 o'clock they went to school. They had dinner at 12:00 o'clock. At 8:00 o'clock they went to bed.

Make the little clocks say:

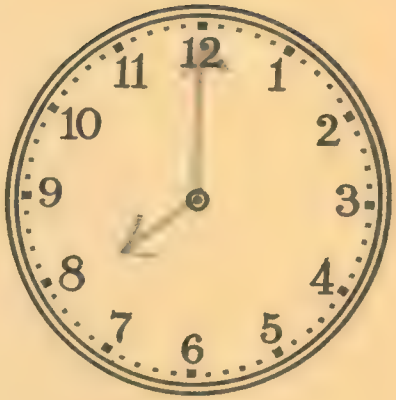
When Linda and Larry got up



When they ate breakfast

Make the little clocks say:

When Linda and Larry went to school

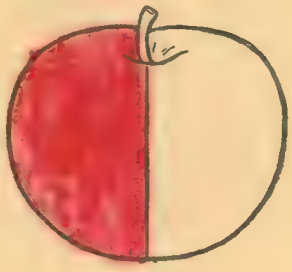


When they ate dinner

When they went to bed

When we cut any thing into two pieces that are alike, we call the pieces halves. One of the pieces is one half.

Color $\frac{1}{2}$ of this apple red.



How much of the apple did you color red? $\frac{1}{2}$ one half

You colored $\frac{1}{2}$ of it red.

When we cut any thing into four pieces that are alike, we call the pieces fourths. One of the pieces is one fourth. We write one fourth like this: $\frac{1}{4}$

Color $\frac{1}{4}$ of this ball blue.

How much of the ball did you color blue? $\frac{1}{4}$ one fourth

You colored $\frac{1}{4}$ of it blue.

The Circus

Father took Larry and Linda to see the circus.

Linda laughed when Father gave an elephant some peanuts. He put 5 peanuts in one hand and 0 peanuts in the other. The elephant looked in both hands, but he found only 5 peanuts.

5 peanuts and 0 peanuts are 5 peanuts.

5 and 0 are 5. 5 and 0 are 5.

$$\begin{array}{r} 5 \\ +0 \\ \hline 5 \end{array} \qquad \begin{array}{r} 0 \\ +5 \\ \hline 5 \end{array} \qquad \begin{array}{r} 5 \\ -0 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 5 \\ +0 \\ \hline \end{array} \quad \begin{array}{r} 0 \\ +5 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ -0 \\ \hline \end{array} \quad \begin{array}{r} 0 \\ +5 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ -0 \\ \hline \end{array} \quad \begin{array}{r} 5 \\ +0 \\ \hline \end{array} \quad \begin{array}{r} 0 \\ +5 \\ \hline \end{array} \quad \begin{array}{r} 13 \\ -9 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ +9 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ -1 \\ \hline \end{array} \quad \begin{array}{r} 15 \\ -8 \\ \hline \end{array} \quad \begin{array}{r} 7 \\ +6 \\ \hline \end{array} \quad \begin{array}{r} 14 \\ -6 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ +8 \\ \hline \end{array} \quad \begin{array}{r} 13 \\ -6 \\ \hline \end{array} \quad \begin{array}{r} 3 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ +8 \\ \hline \end{array} \quad \begin{array}{r} 15 \\ -9 \\ \hline \end{array} \quad \begin{array}{r} 9 \\ +4 \\ \hline \end{array} \quad \begin{array}{r} 15 \\ -6 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ +6 \\ \hline \end{array} \quad \begin{array}{r} 12 \\ -7 \\ \hline \end{array} \quad \begin{array}{r} 4 \\ +7 \\ \hline \end{array} \quad \begin{array}{r} 8 \\ +1 \\ \hline \end{array}$$

5	8	13	13
+8	+5	−8	−5
13	13	5	8

Larry liked the monkeys. All of the monkeys had on little red or blue coats. Five of them had on blue coats, and 8 of them had on red coats. How many monkeys were there? 13

Write this story in numbers: 5 + 8 = 13 8 + 5 = 13

5	8	13	13	8	13	5	13
+8	+5	−8	−5	+5	−5	+8	−8
13	13	5	8	13	8	13	5
5	5	6	6	7	7	8	7
+3	−4	+1	−1	+7	−2	+5	+8
8	1	7	5	14	5	13	15
6	7	6	13	13	6	5	6
+2	+3	+5	−5	−8	+8	+0	+9
8	10	11	8	5	14	5	15
9	18	13	9	12	8	13	13
+6	−9	−8	+8	−7	+9	−4	−9
15	9	5	17	5	17	9	4

The clown did funny things. He tried to catch 13 balls in his hat. 8 of the balls fell to the ground, but he caught the others.

Draw the balls that the clown caught in his hat.

8	13	13	12	9	0	5	17
+5	−9	−5	−7	+6	−0	+8	−8
13	4	8	5	15	0	13	9
4	13	5	8	7	13	8	6
+8	−9	+8	+5	+8	−5	+9	+9
12	4	13	13	15	8	17	15

There were 13 ponies. Some of them were black, and some were white. Linda liked the white ponies. There were 5 white ponies. How many black ponies were there? 8

Write this story in numbers: $13 - 5 = 8$

13	17	6	5	13	0	9	6
−8	−8	+4	+8	−4	+9	+9	+8
5	9	10	13	9	9	18	14
9	15	9	13	5	9	6	11
+8	−7	+6	−5	+8	+2	+9	−7
17	8	15	8	13	11	15	4
8	15	7	15	7	17	7	8
+5	−6	+8	−8	+2	−9	−4	+9
13	9	15	7	9	8	3	17
9	15	13	13	9	13	14	8
+6	−9	−8	−9	+4	−5	−7	+7
15	6	5	4	13	8	7	15

9	7	16	16
+7	+9	−9	−7
16	16	7	9

7 little dogs ran out to the big clown. He called 9 more. How many dogs did he have then? 16

Write this story in numbers: 7 + 9 = 16

He made the 16 little dogs try to jump over a box. 9 of them fell into the box, and the others jumped over. How many jumped over the box? 7

Write this story in numbers: 16 − 9 = 7

9	7	16	16	16	7	9	16
+7	+9	−9	−7	−9	+9	+7	−7
16	16	7	9	7	16	16	9

5	13	8	13	18	15	17	14
+8	−5	+9	−5	−9	−6	−9	−8
13	8	17	8	9	9	8	6

Linda and Larry saw 16 white horses at the circus. Some boys were riding 7 of them. Girls were riding the other horses. The girls made their horses dance. How many horses danced? 9.

Write this story in numbers: $16 - 7 = 9$

9	13	12	8	13	9	16	8
+7	−5	−7	+5	−8	+7	−9	+6
16	8	5	13	5	16	7	14

16	4	5	5	16	9	7	14
−7	+9	+0	+8	−9	+6	+9	−8
9	13	5	13	7	15	16	6

5	8	6	9	8	13	11	9
+8	−2	+9	+7	+7	−9	−5	+8
13	6	15	16	15	4	6	17

13	8	13	7	13	7	15	13
−7	+9	−5	+8	−4	+9	−6	−8
6	17	8	15	9	16	9	5

Many girls were riding horses in the circus. 9 girls were riding white horses, and 7 girls were riding brown horses. How many girls were riding horses in the circus? 16

Write this story in numbers:

9 girls
+7 girls
16 girls

8 clowns tried to ride little horses. They all fell off. Then 5 more clowns tried to ride the little horses, and they fell off, too. Linda and Larry laughed at the clowns. How many clowns tried to ride? 13

Write this story in numbers:

8 clowns
+5 clowns
13 clowns

5	13	16	7	9	15	8	5
+8	−5	−9	+9	+7	−7	+9	+0
13	8	7	16	16	8	17	5

Larry had 2 cents. He gave 2 cents to a man at the circus for a balloon. How many cents did he have left? 0

Write this story in numbers: 2 − 2 = 0¢

2 − 2 = 0	2 − 2 = 0	5 − 5 = 0	3 − 3 = 0	2 − 2 = 0	1 − 1 = 0	9 + 7 = 16	4 − 4 = 0
5 + 7 = 12	6 + 7 = 13	5 + 8 = 13	8 + 5 = 13	13 − 4 = 9	16 − 9 = 7	17 − 9 = 8	8 + 6 = 14
7 + 9 = 16	13 − 4 = 9	4 + 7 = 11	13 − 8 = 5	9 + 7 = 16	9 + 4 = 13	13 − 5 = 8	14 − 6 = 8
15 − 8 = 7	2 + 9 = 11	13 − 9 = 4	5 + 8 = 13	15 − 6 = 9	16 − 9 = 7	17 − 8 = 9	7 + 9 = 16
8 + 5 = 13	13 − 5 = 8	16 − 7 = 9	8 + 7 = 15	5 + 0 = 5	6 + 9 = 15	15 − 9 = 6	13 − 9 = 4

5	9	14	14
+9	+5	−9	−5
14	14	5	9

The next day Larry and Linda made pictures of the circus. They had fun doing it.

They made monkeys with long tails. Larry made 9 monkeys, and Linda made 5. How many did they both make? 14

Write this story in numbers:

9
5
14

Here are 14 monkeys. Color 9 of them.

9	5	14	14	5	14	9	14
+5	+9	−5	−9	+9	−9	+5	−5
14	14	9	5	14	5	14	9

Adding Numbers

Linda and Larry went to school. They learned to add numbers. When we add numbers, we put them together.

The teacher said, "Linda, add 4 and 2." Linda did it like this:

$$\begin{array}{r} 4 \\ +2 \\ \hline 6 \end{array}$$

The teacher asked Larry to add 3 and 3. He did it like this:

$$\begin{array}{r} 3 \\ +3 \\ \hline 6 \end{array}$$

Can you add 9 and 1? Write it here:

$$\begin{array}{r} 9 \\ 1 \\ \hline 10 \end{array}$$

Add:

5	7	9	9	9	0	8	5
7	8	7	0	7	5	9	9
12	15	16	9	16	5	17	14
8	0	5	7	8	6	9	5
5	9	6	9	6	9	5	9
13	9	11	16	14	15	14	14
9	5	7	0	6	9	9	5
6	9	9	0	8	7	7	8
15	14	16	0	14	16	16	13

4	0	4
+0	+4	−0
4	4	4

4	0	4	0	4	0	4	16
+0	+4	−0	+4	−0	+4	+0	−7
4	4	4	4	4	4	4	9
9	5	5	7	5	8	13	8
+7	+9	+8	+5	+9	+6	−9	+9
16	14	13	12	14	14	4	17
16	7	6	5	13	9	5	8
−9	+6	+9	+8	−8	+8	+9	+6
7	13	15	13	5	17	14	14
12	9	7	8	8	7	11	7
−5	+7	+9	+5	+9	+8	−8	+9
7	16	16	13	17	15	3	16
13	14	14	9	11	8	13	13
−5	−9	−5	+9	−7	+5	−4	−6
8	5	9	18	4	13	9	7

Subtracting Numbers

Linda and Larry learned to subtract numbers, too. When we subtract numbers, we take the little number away from the big one.

The teacher said, "Larry, subtract 3 from 7." Larry wrote it like this:

$$\begin{array}{r} 7 \\ -3 \\ \hline 4 \end{array}$$

She asked Linda to subtract 3 from 9. Linda wrote it like this:

$$\begin{array}{r} 9 \\ -3 \\ \hline 6 \end{array}$$

Can you subtract 2 from 8? Write it here:

Subtract:

13	16	14	17	13	14	18	14
8	7	5	9	9	9	9	6
5	9	9	8	4	5	9	8
14	17	13	15	5	15	13	17
5	8	5	6	0	9	9	8
9	9	8	9	5	6	4	9
15	4	14	14	15	17	14	15
9	0	9	8	7	9	9	6
6	4	5	6	5	8	5	9

0 +8 = 8	8 +0 = 8	8 −0 = 8	8 −8 = 0				
8 +0 = 8	8 −0 = 8	0 +8 = 8	8 −0 = 8	8 +0 = 8	0 +8 = 8	8 −0 = 8	16 −7 = 9
14 −5 = 9	5 +8 = 13	4 +9 = 13	12 −3 = 9	2 +9 = 11	5 +9 = 14	14 −5 = 9	12 −9 = 3
7 +9 = 16	16 −8 = 8	2 −2 = 0	0 +4 = 4	11 −5 = 6	3 +8 = 11	9 +7 = 16	0 −0 = 0
9 +3 = 12	16 −9 = 7	13 −5 = 8	4 +0 = 4	3 +9 = 12	4 −0 = 4	7 +6 = 13	8 +8 = 16
4 +0 = 4	8 +5 = 13	13 −8 = 5	7 +8 = 15	14 −5 = 9	8 +9 = 17	0 +4 = 4	13 −8 = 5

Writing Number Stories

One day the teacher said: "I have told you many number stories and have let you write them in numbers. Now I will write the story in numbers and let you tell it."

She wrote $\begin{array}{r} 3 \\ +2 \\ \hline 5 \end{array}$ on the board.

"Linda," she said, "tell a number story about 3 and 2 are 5."

This is the story that Linda told: "I had 3 rabbits, and Larry gave me 2 more rabbits. Then I had 5 rabbits."

"That is fine!" said the teacher. "I like that story."

Add:

5	9	0	4	9	0	5	8
9	7	4	0	5	8	8	0
14	16	4	4	14	8	13	8

5	8	7	8	5	6	7	9
7	9	6	6	8	9	9	9
12	17	13	14	13	15	16	18

Can you tell a number story about $\begin{array}{r} 3 \\ +1 \\ \hline 4 \end{array}$? Write it here:

I have 3 pennies in my pocket. Jose has 1 penny in his pocket. We had 4 pennies all together. 3+1=4

Subtract:

12 − 5 = 7	15 − 9 = 6	14 − 9 = 5	15 − 8 = 7	13 − 4 = 9	15 − 7 = 8	4 − 0 = 4	13 − 5 = 8
14 − 6 = 8	8 − 0 = 8	13 − 8 = 5	17 − 8 = 9	8 − 0 = 8	13 − 9 = 4	17 − 9 = 8	14 − 5 = 9
14 − 9 = 5	14 − 6 = 8	13 − 5 = 8	14 − 8 = 6	13 − 8 = 5	14 − 8 = 6	13 − 5 = 8	15 − 9 = 6

"Is this like Grandmother's clock?" asked the teacher. And she made a clock like this:

"Yes," said Larry. "That is like Grandmother's clock. Will you show us how to tell the time on it?"

"Yes, I will," said the teacher.

The next day she showed them how to do it.

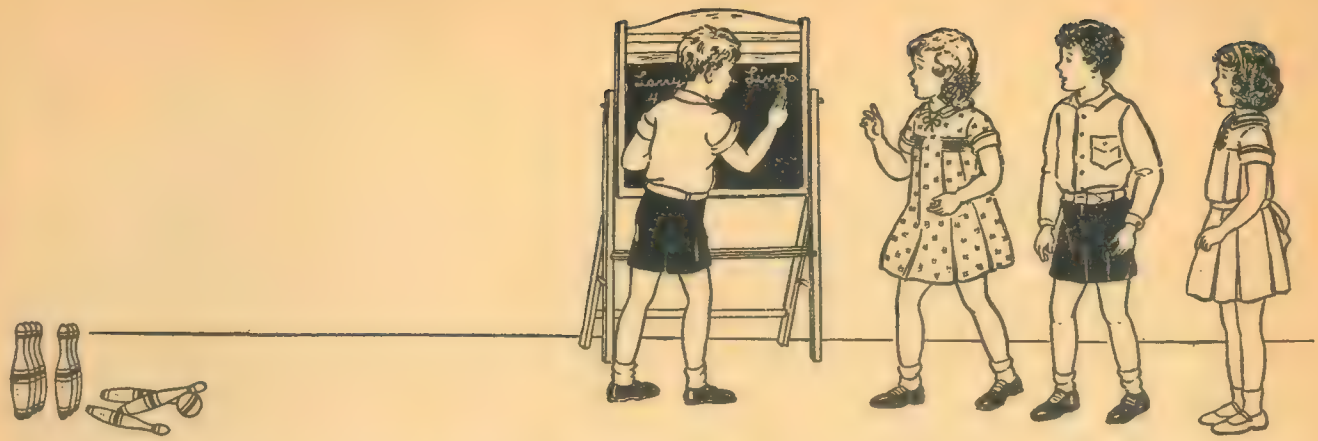
Grandmother's clock

The clock at school

The teacher made two clocks on the board. On one she made numbers like the numbers on Grandmother's clock. On the other one she made numbers like the numbers on the clock at school.

She said: "The numbers on these two clocks are the same. The numbers on Grandmother's clock are called Roman numbers. I will write the Roman numbers on the board, and over them I will write the numbers that are the same."

Look at the next page and see what the teacher wrote.



Larry kept score when Linda played tenpins. Linda made three pins fall the first time she tried, but the second time she did not make any pins fall. See how Larry wrote in her score that she made none fall. The third time she made four pins fall. Larry added her score.

Linda's score

3	3	3
0	0	4
4	3	7
7		

First, he added down. Then he added up. He thought, "3 and 0 are 3; 3 and 4 are 7." Then he said, "Your score is 7, Linda."

Add:

2	3	2	1	0	3
0	0	4	0	4	2
2	5	0	6	4	0
4	8	6	7	8	5

Measures

12 in = 1 ft

The children at school measure to see how tall they are. They use a yardstick. A yardstick is three feet long. There are thirty-six inches in three feet.

Larry is 4 feet and 1 inch tall.

Linda is 4 feet and 0 inches tall.

ft. is the same as *feet.* *in.* is the same as *inches.*

How tall are you? Get one of the children to help you find out how tall you are. Use a yardstick. Put the numbers here:

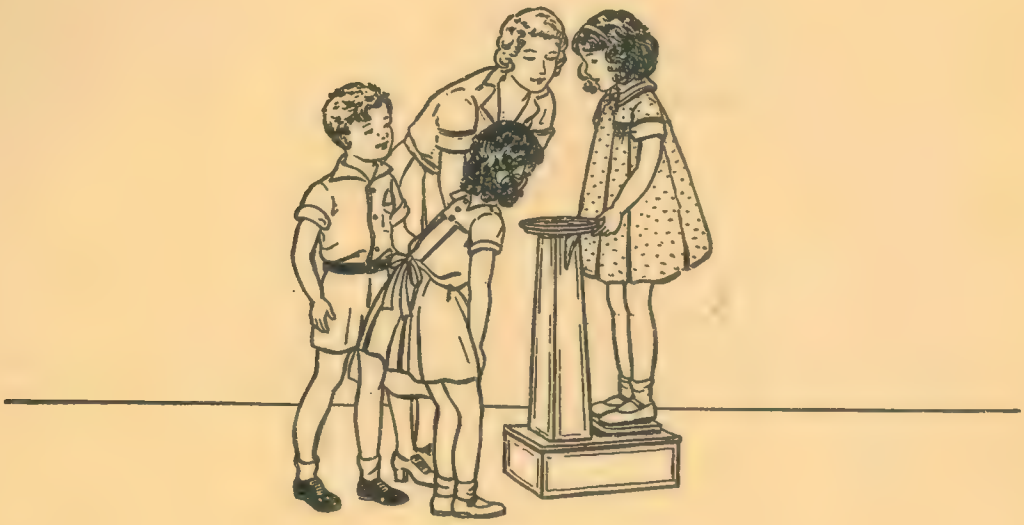
__4__ ft. __1__ in.

Measure four other children. Who is tallest? David

Faye Who is shortest? Jose

How many of the children are taller than you? 2

The children were weighed at school. The teacher looked to see if they weighed what they should weigh. Betty weighed 43 pounds. Larry weighed 56 pounds. Linda weighed 52 pounds.



"Larry," the teacher said, "you should weigh 55 pounds. Your weight is all right.

"Linda, you weigh just what you should.

"Betty, you do not weigh enough. You are under weight."

"How much?" asked Betty.

"I will show you how to find out," said the teacher, and she wrote it like this:

Betty should weigh 54 pounds.
She weighs 43 pounds.
11 pounds under weight

"You should drink milk, Betty," said Larry.

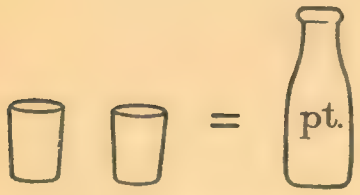
"I do," Betty answered. "I drink two glasses every day. I drink one glass here at school and one with my supper."

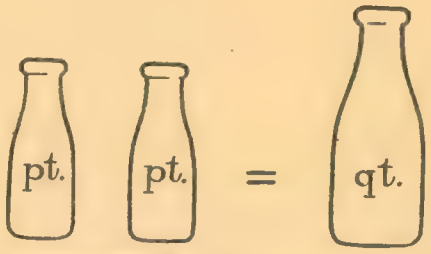
"That is not enough," said the teacher. "Two glasses of milk make about a pint. You should have a quart of milk a day."

"How much is a quart?" Betty asked.

"Two pints make a quart," said Linda.

"That is right," the teacher said. "It is like this." And she drew these pictures on the board:





pt. is the same as *pint.*

qt. is the same as *quart.*

"The milkman leaves one quart of milk at our house every day," said Betty. "That is the same as ____ pints."

"Yes, and it is about the same as ____ glasses," said Larry.

"The milkman leaves 3 quarts at our house every day," said Linda. "Do you know how many pints he brings, Larry?"

Larry did know. How many pints of milk does the milkman leave? ____

Combination Dictionary

1	1	1	1	1	1	1	1	1
+1	+2	+3	+4	+5	+6	+7	+8	+9
2	3	4	5	6	7	8	9	10
2	2	2	2	2	2	2	2	2
+1	+2	+3	+4	+5	+6	+7	+8	+9
3	4	5	6	7	8	9	10	11
3	3	3	3	3	3	3	3	3
+1	+2	+3	+4	+5	+6	+7	+8	+9
4	5	6	7	8	9	10	11	12
4	4	4	4	4	4	4	4	4
+1	+2	+3	+4	+5	+6	+7	+8	+9
5	6	7	8	9	10	11	12	13
5	5	5	5	5	5	5	5	5
+1	+2	+3	+4	+5	+6	+7	+8	+9
6	7	8	9	10	11	12	13	14
6	6	6	6	6	6	6	6	6
+1	+2	+3	+4	+5	+6	+7	+8	+9
7	8	9	10	11	12	13	14	15

7	7	7	7	7	7	7	7	7
+1	+2	+3	+4	+5	+6	+7	+8	+9
8	9	10	11	12	13	14	15	16
8	8	8	8	8	8	8	8	8
+1	+2	+3	+4	+5	+6	+7	+8	+9
9	10	11	12	13	14	15	16	17
9	9	9	9	9	9	9	9	9
+1	+2	+3	+4	+5	+6	+7	+8	+9
10	11	12	13	14	15	16	17	18
1	2	2	3	3	3	4	4	4
−1	−1	−2	−1	−2	−3	−1	−2	−3
0	1	0	2	1	0	3	2	1
4	5	5	5	5	5	6	6	6
−4	−1	−2	−3	−4	−5	−1	−2	−3
0	4	3	2	1	0	5	4	3
6	6	6	7	7	7	7	7	7
−4	−5	−6	−1	−2	−3	−4	−5	−6
2	1	0	6	5	4	3	2	1

7	8	8	8	8	8	8	8	8
−7	−1	−2	−3	−4	−5	−6	−7	−8
0	7	6	5	4	3	2	1	0

9	9	9	9	9	9	9	9	9
−1	−2	−3	−4	−5	−6	−7	−8	−9
8	7	6	5	4	3	2	1	0

10	10	10	10	10	10	10	10	10
−1	−2	−3	−4	−5	−6	−7	−8	−9
9	8	7	6	5	4	3	2	1

11	11	11	11	11	11	11	11	12
−2	−3	−4	−5	−6	−7	−8	−9	−3
9	8	7	6	5	4	3	2	9

12	12	12	12	12	12	13	13	13
−4	−5	−6	−7	−8	−9	−4	−5	−6
8	7	6	5	4	3	9	8	7

13	13	13	14	14	14	14	14	15
−7	−8	−9	−5	−6	−7	−8	−9	−6
6	5	4	9	8	7	6	5	9

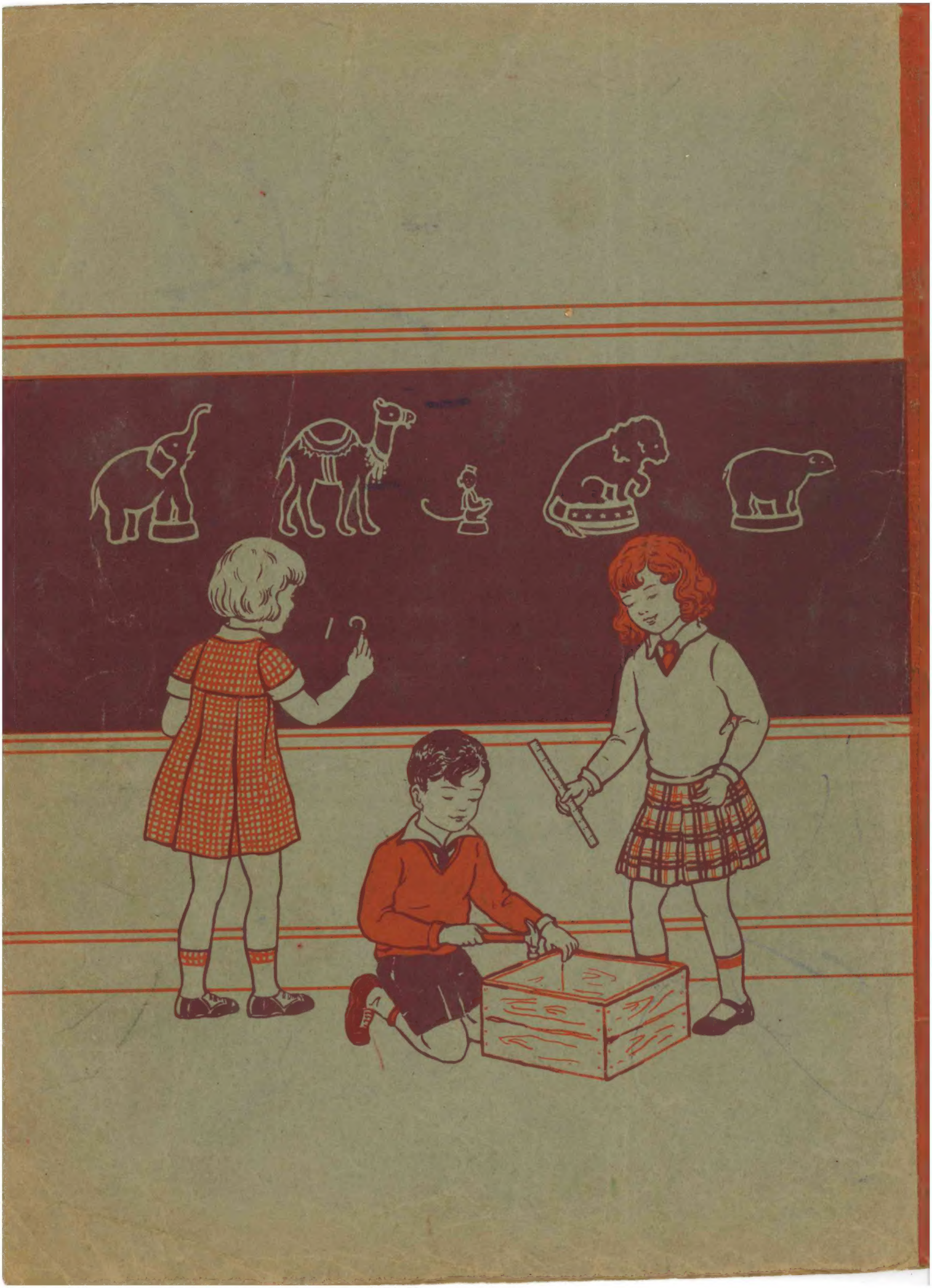
15	15	15	16	16	16	17	17	18
−7	−8	−9	−7	−8	−9	−8	−9	−9
8	7	6	9	8	7	9	8	9

0	0	0	0	0	0	0	0	0
+1	+2	+3	+4	+5	+6	+7	+8	+9
1	2	3	4	5	6	7	8	9

1	2	3	4	5	6	7	8	9
+0	+0	+0	+0	+0	+0	+0	+0	+0
1	2	3	4	5	6	7	8	9

1	2	3	4	5	6	7	8	9
−0	−0	−0	−0	−0	−0	−0	−0	−0
1	2	3	4	5	6	7	8	9

0	0
+0	−0
0	0

My Pack Progress Chart

To THE TEACHER: When the pupil has mastered Pack 1, direct him to color the square above that is numbered 1. This process is to be repeated when Pack 2 is mastered and so on until all the squares are colored.